

Date: Thu, 4 Feb 93 10:38:39 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #168
To: Info-Hams

Info-Hams Digest Thu, 4 Feb 93 Volume 93 : Issue 168

Today's Topics:

73 Magazine Circulation Figures
Can scanners pick up CORDLESS phones ??
Dot channels on VHF/UHF
Mobile rig in Camry
No Code Proposition
PI network in Swan 700CX
QSLing (was: Why wont any Deleware ... etc.)
Quote EMF-Cancer research
rtty on PC (was: none)
Solar panel night discharging
Watt gives here?
Why won't any Deleware station QSL?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 3 Feb 1993 20:28:33 GMT
From: concert!gatech!swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!usc!
sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@decwrl.dec.com
Subject: 73 Magazine Circulation Figures
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jeffj@cbnewsm.cb.att.com (jeffrey.n.jones) writes:

>I seem to remember one ham mentioned that his friend's ads did alot better
>in 73 then the other ham mazzines. So maybe there is some truth to Wayne's
>comments. 73!

Did you ever notice that 73 is top-heavy with ads from small "garage-shop" companies? I suspect that part of the reason is that the small proprietors aren't hooked in to the old-boy ham radio gossip network and so aren't aware about the stories of 73's whimsical circulation figures. The big outfits know pretty much what 73's circulation actually is, and base their ad campaigns accordingly.

AL N1AL

Date: 4 Feb 93 07:24:13 GMT
From: swrinde!zaphod.mps.ohio-state.edu!uwm.edu!spool.mu.edu!olivea!apple!
rbn@network.UCSD.EDU
Subject: Can scanners pick up CORDLESS phones ??
To: info-hams@ucsd.edu

Yes, but only if the phones are relatively light and the scanner is heavily magnetized.

I believe you'll find it's much easier to pick up cordless phones with your hands.

I'm surprised no one has asked the question, "Can dual-band HT's pick up girls?"

Date: 4 Feb 1993 01:21 CST
From: swrinde!zaphod.mps.ohio-state.edu!cs.utexas.edu!tamsun.tamu.edu!
zeus.tamu.edu!mab3474@network.UCSD.EDU
Subject: Dot channels on VHF/UHF
To: info-hams@ucsd.edu

Anyone have a complete list of the color-dot and letter-dot business channels on VHF and UHF? I have lots of color-dot freqs but only a couple of letter dot freqs. Thanks for any help.

* Namenet : Myles Barkman aka 'Scanman' Texas A&M University *
* Hamnet : KG5AI Member W5AC-TAMU ARC College Station TX *
* Internet : mab3474@venus.tamu.edu RACES Grad-Dec.92 *
* Bitnet : mab3474@tamvenus ARES BS Electronics *
* Packetnet : kg5ai@w5ac.tx.usa.na SKYWARN Engineering Technology *
* ICBMnet : 30.606 N 96.316 W I never met a tornado I didn't like. *

Date: Thu, 4 Feb 1993 05:04:42 GMT
From: agate!spool.mu.edu!howland.reston.ans.net!bogus.sura.net!udel!gatech!
concert!rock!scamp.concert.net!jrr@ames.arpa
Subject: Mobile rig in Camry
To: info-hams@ucsd.edu

>There was a thread here several months ago concerning the Toyota Camry's
>computer being susceptible to RF from a mobile rig. Sure enough, my owner's
>manual warns against installation of anything other than a cellular phone
>without "consulting the service department". Well, the service department
>hasn't a clue. Opinions from fellow hams vary from, "use teflon coax, to
>"shield the computer", etc. Nearly everyone has heard the tale of Camry's
>propensity to die at the pressing of a mic button, but none can remember
>where or when.
>Has anyone had experience with such an installation, or offer advice?

With some care and proper choice of rig it can be done without having problems. I have an FT-5200 installed in a 92 Camry LE and have no ECM problems. The rig is installed in the trunk with the control head mounted on the console and remote speaker under the dash. But, being aware of other's experiences I set the high power limit on both bands to 20 watts before installation. The antenna is from Diamond and mounted on the left rear trunk opening using about two to three feet of coax to the rig. Power is taken from the battery. All cabling is run through the left sill cable channel which is not the ideal path along with other wiring but alternatives would have been quite difficult.

I have no idea if there would be problems with my Camry at higher power levels. Since 20W satisfies my purposes, I've never tried more power. It is clear from other experiences that one can have problems when the RF components of a rig are mounted near the driver's position. As I recall this model has 4 computers, three under the dash in front of the passenger seat and one in the console between the front seats. Add one more computer if you have ABS brakes. So, up front is not the place to locate a rig.

With the 1994 model year Toyota will be revising their statements that relate to 2-way radios and allow power up to 100W providing installation meets a 6-7 point criteria. I suspect there will be design changes made with the 94s but I have no explicit knowledge of such. My only violation from these instructions was to use the wiring channel to route audio, control, and power cables.

What I know about ham rigs in the 92 Camry has come from my own experience, from this forum, from a lengthy phone call from a Toyota rep in response to my unhappy camper letter, and most importantly from the efforts of Ed Hare at ARRL. Ed has collected files of info from most manufacturers relating to current production vehicles. It was a letter from Toyota to Ed that revealed

Toyota's 1994 model year plans.

So, it can be done with some careful respect of the ECMs. Good luck.

--joe W4BZL

PS: Never seen my engine react to my mic button in any way, nor from anybody's mic button for that matter. Great vehicle by the way.

Date: 4 Feb 93 05:12:08 GMT

From: agate!usenet.ins.cwru.edu!gatech!pitt.edu!edc3jr!sillett@ames.arpa

Subject: No Code Proposition

To: info-hams@ucsd.edu

In article <1993Feb04.014910.6790@mixcom.com> kevin.jessup@mixcom.mixcom.com (kevin.jessup) writes:

%

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. .
.

Discussion of what should be on exams for all grades above Novice.

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. .
.

%

%The theory that comes to mind includes simple RC, RL and RLC circuits,
%capacitive and inductive decay calculations, simple transistor biasing
%circuits, class A, B and C amplifiers.

Electrical theory certainly is an excellent area to use to "weed-out" the CBers, but shouldn't be a requirement for an average-level license like General. Sure, such questions would be fitting for an Extra test, but we should concentrate on making all HAMS at all levels competent. How this can be brought about is another problem, but I think you have an excellent idea in the next sentence:

% Greater knowledge of

%antenna and transmission line characteristics could also be required.

Hear! Hear! Today's HAM doesn't need to know the intricate details of his radio. After all, very few people can dissect a modern handi-talkie. And why should you have to? What we can teach people is that you don't need to run 1 kW to hit the local repeater. You can do wonders with an antenna. This is one area where SWLs truly excel over HAMS. Every SWL knows the importance of a decent antenna. As

for HAMS, all you need to do is listen to 10 minutes to hear about wonders a 60w linear amp can do for a rubber-duckie.

%the amateur radio equipment I own was designed by an eight-year-old
%either.
%/

Maybe we should have essay questions to compare/contrast SSB with RTTY!

```
%
%The original post also mentioned periodic "retesting". Well, if
%it's good for the "no codes" it's good for the "general", "advanced"
%and "extra" classes too!
%
```

Why not use the same logic used for drivers exams? Make the seniors (i.e. Extras) prove their salt every few years! (Calm down, just a joke. The 10-year licence is fine.)

```
%
%And another thing...it's called a TECHNICIAN license, NOT a
% "NO CODE" technician license.
%
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Why the big fuss anyhow? Even with the 5wpm code, a Technician's HF privs suck. You have to upgrade to General to do anything....gee...looks like a pretty good example of incentive licensing!

```
%
% ...anxiously awaiting my TECHNICIAN license and PROUD OF IT!
%
```

I'm spending a lot of time with the mailman myself!

- - - Bob

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--
| Robert L. Sillett           Internet:   sillett@edc3jr.gsph.pitt.edu |
| Systems Analyst            US Mail:    127 Parran Hall             |
| Certified Novell Engineer (CNE)        130 DeSoto St.             |
| University of Pittsburgh          Pittsburgh, PA 15261             |

```

Date: 4 Feb 93 15:13:08 GMT

From: news-mail-gateway@ucsd.edu
Subject: PI network in Swan 700CX
To: info-hams@ucsd.edu

The question was posed:-

>
>When I dip my grid and peak my plate (vice versa?) on my Swan 700CX
>to bring my tubes into resonance what exactly is occurring?
>

The plate impedance of your tubes is in the region of 1 to 5 Kohms (depending on the current/voltage and class of operation). The impedance of the antenna is probably around 50 ohms. Your Pi-network is acting as a tuned impedance matching transformer; matching the 1 to 5K plate impedance to the 50 ohm antenna. It can also add capacitive or inductive reactance to tune out any inductive or capacitive reactance your antenna may have (no antenna, except a dummy-load, is a perfect 50 ohm match). The 'tune' and 'load' capacitors effectively act as movable taps along the resonant circuit. At some (several) combination of values of L and C, you get the correct impedance transformation, and the energy from the tube plates is coupled to the antenna with maximum efficiency. The Pi-network also acts as a low-pass filter and helps to cut down on TVI-generating harmonic radiation.

Peaking the grid control is tuning the L-C circuit in the final tube's grid circuit to resonance, ensuring maximum drive is available to the tube at the frequency in use.

Pete Lucas G6WBJ A no-code license-holder for the last 10 years
pjml%uk.ac.nsw.swmis@nsfnet-relay.ac.uk (Internet)
p.lucas@uk.ac.nerc.ncs (JANET)

Date: 4 Feb 93 16:52:07 GMT
From: news-mail-gateway@ucsd.edu
Subject: QSLing (was: Why wont any Deleware ... etc.)
To: info-hams@ucsd.edu

> My own personal policy is to QSL every card received, regardless as to wether
> the other guy includes a sase or sends it like a post card. I also send out
> a card for each contest QSO I make, unless the station already has my card,
> or they are a big multi-multi effort from a country I have confirmed because
> of the volume that they will receive.

I used to wonder why a few hams make a big deal of buying large print/space in the Callbook and say "I QSL 100%". I guess this is the reason -- its getting to be an uncommon phenomenon. I think I may do that in the Callbook myself. I do QSL 100%, domestic and foreign, unless I've worked that station on the same band and mode before and even then, I may miss her, and QSL her again. I get a fair number of QSLs back -- maybe 50% (have never checked the return rate), but I've noticed that I very rarely get a QSL before I send one. And sometimes, I'm as much as a year late getting a card out. But I DO get it out.

steve - W3GRG
mosier@uncg.bitnet
mosier@iris.uncg.edu

Date: Wed, 3 Feb 1993 20:46:50 GMT
From: concert!gatech!swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!usc!
sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@decwrl.dec.com
Subject: Quote EMF-Cancer research
To: info-hams@ucsd.edu

On my way home last night, I listened to a long report about the relation between cancer and EM fields on KQED, the San Francisco PBS radio station. It seemed like a pretty well-balanced report. They mentioned the recent Swedish study as being the strongest evidence to date linking childhood leukemia to living near high-voltage transmission lines. I was astonished, however, when they said that the study found 7 cases of leukemia versus 2 to 3 expected. If I heard those numbers right, then that doesn't sound like very strong evidence to me.

Let's say you roll a pair of dice 100 times. You can calculate that you should roll "snake eyes" (two one's) about $100/36 = 2.8$ times.

Now of course, it's impossible to roll anything 2.8 times. If you ran this experiment a number of times, you would typically get a range of values (averaging to 2.8 if you did enough experiments.) I don't think getting 7 pairs of one's in 100 tries would be all that unusual.

Not to mention that there may be other factors influencing leukemia near power lines, such as the use of pesticides to keep down weeds in the power company right-of-way, exhaust fumes (HT lines tend to be near highways), the lower socioeconomic status of families that live very near power lines, etc.

AL N1AL

Date: 4 Feb 93 16:16:39 GMT
From: news-mail-gateway@ucsd.edu
Subject: rtty on PC (was: none)
To: info-hams@ucsd.edu

>Paul, GW7KES@GB70NV pdu@ua.nrb.ac.uk
writes:

>has nyone had any luch at driving PC serial ports at 45 or 50 baud. If not
>has anyone had any luck at using software to drive a PC parallel port as a
>TTL serial port at the baud rates (it should certainly be possible). A friend
>of mine has bought a RTTY demodulator kit, and a TTL to RS-232 level converter
>kit, but the PC doesn't seem to want to handle the slow baud rates required.
>RTTY to ASCII conversion is handled by the use of a lookup table take from a
>book on Amateur Radio Computing.

The DOS mode command does usually not support less than 110 baud.
Do look in either the IBM-PC hardware manual or in a book describing the
programming of the 8250 serial I/O chip in the PC. If you have a more modern
PC you might have the 16550 chip instead, but the programming is the same.
You can by writing the correct bytes to the registers in the port chip
program it to 5 data bits and 1.5 stop bits. The baud rate is programmed in
one of the PC's timers. I don't remember which since my hardware manual is
at my work. Remember however that the baud clock supplied by the timer chip
to the 8250 or 16550 is 16 times the actual baud rate.

73 de

Peter, SM7LEK, <Peter@maxlab.lu.se> "God said: $E=MC^2$ and there was light.

Date: Thu, 4 Feb 93 00:59:15 GMT
From: sun-barr!cs.utexas.edu!gerald@cc.utexas.edu!slcs.slb.com!leo.asc.slb.com!
sjsca4!jones@ames.arpa
Subject: Solar panel night discharging
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.uucp) wrote:
: In article <1993Feb2.213544.7540@sunova.ssc.gov> greg_chartrand@qmail.ssc.gov
(Greg Chartrand) writes:
: >Diodes are OK, but you loose the .3-.7V drop across the diode. This drop
: >is equivalent to about 1/2 of one cell, a waste of valuable power!
[some deleted]
: This will work, of course, but you've traded a small voltage drop for
: a continous current draw via the relay coil. Just using a Shottky diode
: is likely both more reliable and less of a parasitic load. Note that
: most "12 volt" panels actually put out a no load voltage of about 17
: volts in full sun.


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:
: Gary
:
: --
: Gary Coffman KE4ZV          |    You make it,          | gatech!wa4mei!ke4zv!gary
: Destructive Testing Systems |    we break it.          | uunet!rsiatl!ke4zv!gary
: 534 Shannon Way            |    Guaranteed!           | emory!kd4nc!ke4zv!gary
: Lawrenceville, GA 30244     |                           |

```

What everybody is missing is that a solar panel, given a constant amount of light, is a nearly perfect _current_ source up to it's maximum voltage. A panel that puts out, say, 3 amps at 14.6V (i.e., a lead-acid battery) will put out very close to 3 amps into a 1 ohm resistor. In my humble opinion, if your panel is small enough in relation to the battery to not need regulation, just use the Schottky diode. But, how do you know if you need regulation?

Well, now, that's another question. If you've got "wet cell" batteries, typically C/100 or so (for example, 1A into a 100AH battery) definitely does not need a regulator as it is a trickle charge. When you get over, say, C/40 or so you should have a charge controller. (Remember, this is for wet-cell batteries, i.e., ones that you can add water to. Gelcells should have a controller at lower charge rates.) Then there are so-called "self-regulating" panels, which have a cutoff voltage that is about the same as the voltage on a fully-charged lead-acid wet-cell battery (plus the diode! ;-)_at a given temperature_. (I'm not fond of these things, because of that constant temperature gotcha.)

--

Disclaimer: The opinions expressed above are mine and not those of Schlumberger because they are NOT covered by the patent agreement!

Phone: (602) 345-3638 RF: N7RPQ
 Snail: Clark Jones, Schlumberger Technologies, 7855 S. River Pkwy #116, Tempe,
 AZ 85284-1825

Date: Sun, 31 Jan 1993 13:12:00 GMT
 From: emba-news.uvm.edu!trantor.emba.uvm.edu!braner@uunet.uu.net
 Subject: Watt gives here?
 To: info-hams@ucsd.edu

"Watts of power"? That's pretty good for laymen. It's when the newspapers describe the power output of a power station in "kilowatt-hours per year" that I start screaming and climbing the walls :-)

And sometimes they omit that "per year", as is common for most monetary rates quoted in the media. As in: "the federal deficit has risen to 300 billion dollars", which really means "the federal debt will increase this year by an additional \$300B, or about \$1000 per person, to a total of several times that much". :-) :-(

- Moshe "BTUs (per hour)" Braner

(BTW: can anybody tell me where I can find 6' of RG174/U?)

--

Moshe Braner
47 McGee Road, Essex, VT 05452

braner@emily.emba.uvm.edu
(802) 879-0876

Date: 3 Feb 93 16:57:23 EST

From: saimiri.primite.wisc.edu!zaphod.mps.ohio-state.edu!sdd.hp.com!ncr-sd!ncrae!
ncrhub2!ncrgw2!psinnntp!arrl.org@ames.arpa

Subject: Why won't any Delaware station QSL?

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jeffj@cbnewsm.cb.att.com (jeffrey.n.jones) writes:

>In article <C1uMsM.M43@acsu.buffalo.edu> v111qheg@ubvmsb.cc.buffalo.edu
(P.VASILION) writes:

>>How come, after a good many CW and SSB QSO's has not one Del. station returned
>>a QSL card request? Are not any of you proud of your call? :-)

>>

>>73 de Peter KB2NMV

>

>I sent a SASE to the station that worked me when I called CQ DE. Got it back
>about 2 weeks later. One of the last states I needed for CW WAS. I would
>suggest that you try that as the rare states are almost like rare DX
>and get a lot of requests for QSLs. Maybe we'll have to start sending
>green stamps? 8-)

In the process of collecting QSL cards for counties, I have encountered every possible level of QSling, ranging from the unsolicited card, to blatant refusal to QST under any circumstance. There is nothing one can do about the latter, but in the middle ground, there is a lot of room for creativity. I have found the following sequence to work fairly well:

#1 - I send my QSL, and SASE and a pre-filled "U-Fill-EM" type of QSL with all of the appropriate info already filled in. If the station doesn't

have a pre-printed card, all that is needed is a signature.

2 - If that doesn't work, I repeat the process, but include a cheap BIC pen. If the operator can't find a pen, at least one is handy.

3 - If that doesn't work (by now I am less than pleased), I send another SASE, asking for the return of the pen.

Overall, about a 90% response rate to #1 and #2. I don't want to ever find out the possible responses to #3. :-).

73 from ARRL HQ, Ed -- KA1CV

Ed Hare, KA1CV
American Radio Relay League
225 Main St.
Newington, CT 06111
(203) 666-1541 - voice
ARRL Laboratory Supervisor
RFI, xmtr and rcvr testing

ehare@arrl.org

You will never put the puzzle together
if you keep putting all the pieces
back in the box.

Date: Thu, 4 Feb 1993 07:50:16 GMT
From: swrinde!zaphod.mps.ohio-state.edu!darwin.sura.net!gatech!concert!samba!
usenet@network.UCSD.EDU
To: info-hams@ucsd.edu

References <C1txLI.ErH@boi.hp.com>, <1993Feb04.014910.6790@mixcom.com>,
<3109@blue.cis.pitt.edu>amb
Subject : Re: No Code Proposition

Just for info, I've been license for a total of about 3 weeks now. They (er..the) exam was easy, but not trivial. I think it gives enough information to keep you from screwing up (ie: out of band, TVI, etc) without requiring a PhD in electronics.

The BEST way to encourage good operating practices is to talk to folks on the air. I'm learning in leaps and bounds. I've already ordered parts for some simple projects (DTMF decoder) and have been getting info and help from other hams. THIS, IMHO, is the best method. Is there really a need for folks to know how the digital circuits operate to be a good ham? I don't think so... Those that want to further their knowledge will.

BTW: I'm a BioChemistry major. Never had an electronics class in

my life, and now I'm wishing there were more time in the day to learn more about amateur radio, electronics, etc.

-ks
KD6RCT

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The opinions expressed are not necessarily those of the University of North Carolina at Chapel Hill, the Campus Office for Information Technology, or the Experimental Bulletin Board Service.
internet: laUNCHpad.unc.edu or 152.2.22.80

Date: Thu, 4 Feb 1993 00:37:20 GMT
From: panix!oppedahl@nyu.arpa
To: info-hams@ucsd.edu

References <1knu36INNmsu@shelley.u.washington.edu>,
<1kp6eh\$c7f@agate.berkeley.edu>, <1kp7j3\$dhq@agate.berkeley.edu>p
Subject : Re: Microphone/Earphone Combos

In <1kp7j3\$dhq@agate.berkeley.edu> marchant@bodega.Berkeley.EDU (Will Marchant) writes:

>After posting my minor flame about the EarTalk microphone system, I got off
>of my butt and called the folks down at Genesys. They were unfailingly polite
>(as always) and offered to do whatever was necessary to fix the problems I was
>having. I will send them my radio and EarTalk unit so that their Icom certified
>technician can check my radio for proper function. We also discussed the
variances
>in peoples ear shapes. It certainly is true that the unit hangs a little
>off-center in my ear. They are currently working on a prototype for a more
>conventional ear plug (i.e. a little nipple that will attach to the unit and
>stick into your ear canal) that should help with the signal level AND help retain
>the unit in a persons ear. So I will keep you folks appraised of my experiences.
The Radio Shack 49-MHz units certainly have a combination mike/earphone
that works well.

A friend of mine who has tried out the Eartalk product found that the mike gain was not really good enough. He is planning to put a little op amp or something like that in the cord to boost the audio level a bit for the mike.

--

Carl Oppedahl AA2KW (intellectual property lawyer)
30 Rockefeller Plaza

New York, NY 10112-0228
voice 212-408-2578 fax 212-765-2519

Date: 4 Feb 1993 08:44:29 GMT
From: swrinde!sdd.hp.com!usc!elroy.jpl.nasa.gov!oak!laborde@network.UCSD.EDU
To: info-hams@ucsd.edu

References <C1txLI.ErH@boi.hp.com>, <1kmnpgINNmpk@west.West.Sun.COM>,
<1993Feb4.010546.12345@samba.oit.unc.edu>
Subject : Re: Proposition

In article <1993Feb4.010546.12345@samba.oit.unc.edu> Kirk.Smith@launchpad.unc.edu
(Kirk Smith) writes:

>...

>Where else are they supposed to practice the code? 2m? I have had the
>2m CW stuff in my scanner for quite some time and have heard NOTHING.

I would expect that if you are listening to the CW allocations in the 2 m band
with your NFM scanner you are not going to hear anything.

Some of my associates and I have been discussing establishing a 2 m CW net
for the purpose of practicing actual QSOs. In this way we hope to actually be
able to USE CW rather than just have memorized it to pass a test. We hope that
some local Elmers will help us to refine our operating technique as well.

I understand there is a low-cost kit available to make a key-to-HT interface
to transmit CW using audio tones over FM. I would appreciate information on
such a kit.

Thanks,
-Greg.

End of Info-Hams Digest V93 #168
